Wetroom Thermostat
Installation Instructions

Wetroom thermostat for zonal Underfloor heating temperature control for new installations or to replace existing Polypipe wired Room thermostats in wetroom environments. Support for up to 10 separate heating zones. Provides programmer / time clock functionality. Requires Heating Hub Unit to operate.

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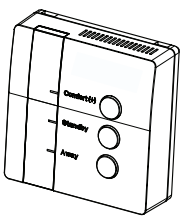

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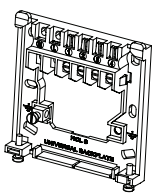

Backplate

Safety Cover

Temperature Sensor

2 x AAA alkaline battery

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Introduction

This thermostat is a part of the Polypipe range of cloud connected monitoring and control products. Its operation is dependant upon being paired to the broadband Internet connected Heating Hub Unit (supplied separately). The thermotstat provides both room thermostat and programmer / time clock functionality.

Basic day-to-day user operation changes can be made using the three buttons. Additionally there is comprehensive yet intuitive and easy to use control via the Polypipe web dashboard. Accessible from any Internet connected computer anywhere in the World. iPhone and Android smartphone apps are also available for free download.

It is recommended that this product is installed by a suitably qualified heating engineer, plumber or electrician.

Please read the Safety Information section of this document before proceeding.

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Version Information

This thermostat is battery powered with a latching relay. It has 3 control buttons - Comfort (+), Standby and Away with associated LED indicators.

Installation Configurations Supported

This thermostat can be used in several ways to suit various heating control needs:

Thermostat Type: Wired connection Polypipe wired master or slave unit.

Multi Heating Zone Control: A single Polypipe system can support up to 10 thermostats (one for each heating zone) in a wired configuration. This flexibility enables Polypipe to be used to control heating systems that are Building Regulations Part L compliant and beyond.

Maximum Number of Devices: Every Polypipe device within a single system, e.g. Wet-room thermostat, Room thermostat must be paired to the Heating Hub. The Heating Hub supports up to a maximum of 10 devices.

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Installation Instructions

Single or multiple heating zones

If this is a single zone heating system then simply follow these instructions. The Polypipe system will support up to 10 heating zones. For additional thermostats simply repeat these instructions for each one required. The web dashboard will automatically update the Heating widget with the additional device when you next log in.

STEP ONE - Install Heating Hub Unit

- If you are adding heating controls to an existing Polypipe installation then please jump to STEP THREE - Log in and follow Wizard.
- If this is a new Polypipe installation then you will first need to install the Heating Hub (supplied separately). For full details please refer to the Heating Hub installation guide supplied with that product, however a summary of the steps are listed below:
    1. Connect Ethernet cable between spare active LAN port on your broadband Internet router and the Heating Hub.
    2. Plug the power supply into the mains and insert the DC jack connector into the base of the Heating Hub.
    3. Wait until the green LED on the top of the Heating Hub is flashing with a "triple blip" pattern. This should not normally take longer than 2 minutes.
    4. **Do NOT proceed to STEP TWO until this flashing pattern is observed.**

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STEP TWO - Create Polypipe online account

- If you are adding heating controls to an existing Polypipe installation then please jump to STEP THREE - Log in and follow Wizard.
- If this is a new Polypipe installation then you will first need to create a new Polypipe account. For full details please refer to the Polypipe installation guide supplied with that product, however a summary of the steps are listed below:
    1. Using a web browser visit **https://controlmyheating.poypipe.com**
    2. Click "Create Account".
    3. Check and confirm that the Heating Hub is online.
    4. Fill in the information requested.
    5. Click "Create Account" button.
    6. Ensure successful account creation completion message is displayed.

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STEP THREE - Log in and follow Wizard

- Log in to the Polypipe account with username and password.
- If this is a new system the installation & configuration Wizard will automatically open. For existing Polypipe installations you should start the Wizard by clicking the Wizard menu bar option at the top of the screen.
- Select "Heating / Hot Water Control" from the drop down box.
- Click the "Start" button and follow the Wizard through these steps:
- Select "Room/Wetroom Thermostat" from the drop-down box in the Wizard.
- Click the Next button and carefully follow Wizard on-screen instructions to pair the Thermostat to the Heating Hub.
- Fit Thermostat to its back plate.
- Test for correct operation including - **safety switch must be closed for correct operation.**
- Click the "Finish" button.
- Unless you have further Polypipe devices to install / configure then click the "Finish"

Configuration Wizard
Introduction
Please use this wizard to ADD new monitoring or control elements to your system.
Please select an appropriate option below then click Start, or click Finish once all devices have been set up.
Heating / Hot Water Control
Finish
Start

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button.

- Click the "OK" button to close the Wizard. The web dashboard will then automatically refresh itself and you should now have a Heating widget within the web dashboard.

STEP FOUR - Log in and Configure

If you are not already, please log in to your Polypipe account with your username and password at:

https://controlmyheating.polypipe.com

You should now have a Heating widget within your web dashboard.

1. **Configure System Settings**
   Select the System menu. Select an appropriate Energy Performance Certificate ("EPC") rating for this property. Enter the actual EPC rating if you have one, if not just estimate how you would rate the energy efficiency of the property on the A to G scale below. Be sure to click the "Save" button before closing the window.
2. **Configure Heating Settings**
   You can make any necessary changes

Property EPC / Energy Efficiency Rating

Rating	Score	Description
A	92+	Exceptional
B	81 - 91	Above Average
C	69 - 80	
D	**55 - 68**	**UK Average**
E	39 - 54	
F	21 - 38	Below Average
G	1 - 20	

to the various Heating settings by clicking on the "gear wheels" icon on the grey Heating widget title bar.

3. Configure Time Clock

The Heating Time Clock defines the periods during which the home is automatically heated and to what temperature. These periods are called Comfort Periods. Polypipe will intelligently calculate what time to switch the heating system on and off to maintain the target temperature for the whole of the Comfort Period. Each day of the week can be programmed with up to 10 different Comfort Periods.

The preset heating 'Comfort' Time Clock settings are shown in the table opposite. These can be modified using the Polypipe web dashboard.

a. On the Heating widget click on the "Clock" icon. This opens the Heating Time Clock widget.

b. Select the day you wish to amend, then click an option on the line you wish to amend.

Preset Heating 'Comfort' Time Clock Settings

Monday to Friday		
Start Time	**End Time**	**Temperature**
07:00	08:30	18°C
16:30	22:30	20°C
Saturday & Sunday		
Start Time	**End Time**	**Temperature**
07:30	10:00	18°C
16:30	22:30	20°C

Note: Outside of these preset heating 'Comfort' periods, the Room Sensor will be in Standby mode (15°C - configurable).

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i. Pencil icon to edit the line.
ii. Cross icon to delete the line.

c. Amend details within the Edit box as required then click on the Tick icon to update the table.
d. To add a new line simply fill in the Add box with the required details and click on the Tick icon.
e. When you are happy with your changes you can use the Copy Current Day feature to quickly duplicate to other days.
f. IMPORTANT: When you have finished making changes you must save them to your Heating Hub Unit by clicking on the "Save To Heating Hub" button.

STEP FIVE - Physical installation of the Thermostat

Refer to the schematics and diagram shown on pages 12 & 13 for the wiring arrangement for a typical heating system. The diagram should be used for guidance only.

They can also be downloaded from the Polypipe web dashboard under Manuals.

The Thermostat should be located on an internal wall outside of the wetroom area approximately 1500mm above floor level, you must use the backplate provided. It should be positioned away from draughts, direct heat and sunlight. The Wetroom Sensor also needs the temperature probe plugged into the rear of the device and stowed away in the sensor housing provided, which should be wall mounted in the wetroom area. The backplate is suitable for direct wall mounting using two wood screws No. 6 x 1" or M3.5 x 25mm into

correctly sized wall plugs if required. Alternatively mount on to a single gang flush wiring box complying with BS4662, using two M3.5 screws.

1. **Check Signal Strength** - With the thermostat at the chosen installation location you should now check the signal strength icon shown on the web dashboard Heating widget. The signal should be at least 2 bars and preferably more. Try moving the Heating Hub closer to the thermostat if you have a signal strength problem.
2. **Ensure** there will be enough space to allow easy screwdriver access to the two captive screws located at the base of the backplate.
3. **Electrical Connections: -** ***If in any doubt whatsoever, do not continue, but consult a qualified electrician or heating engineer.***

   WARNING: ISOLATE THE MAINS SUPPLY BEFORE COMMENCING INSTALLATION

   For existing installations, remove the old room thermostat to expose the wiring back to the heating system. **Check the wiring at both ends to correctly identify which wire is Live and which is Switched Live.**
   For new installations, run a new cable between the heating system and chosen thermostat Location. The recommended cable size is 1.0mm^2. See diagram.

a. **Ensure that the Live feed to the thermostat is correctly fused (3A or 5A maximum) - This protection is normally provided by the Polypipe master wiring unit.**
b. **Fix the backplate** - Offer the backplate supplied to the

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wall in the position where the thermostat is to be mounted.
Drill and plug the wall, then secure the plate into position. The slots in the backplate will compensate for minor misalignment of the fixings.

c. **Wiring** - All necessary electrical connections should now be made.

- The Thermostat is double insulated and does not require an earth connection.
- An earth connection block is provided on the backplate for terminating any cable earth conductors.
- Earth continuity must be maintained and all bare earth conductors must be sleeved.
- If one of the existing wires is a Neutral supply then this should be 'parked' on the terminal labelled 'N'.
- Ensure that no conductors are left protruding outside the central space enclosed by the backplate.
- Please ensure that all installations comply with the current IEE regulations.
- Please consult the heating system manufacturers installation instructions before making these connections and note that a link may need to be removed when connecting external controls.

4. **Fit Safety Cover** - Check all of the wiring is safely attached to the appropriate backplate terminals and the screws are tight. Then fit the Safety Cover by clipping it into place over the wiring terminals.

5. **Complete** the installation by mounting the Thermostat to the backplate. To do this engage the Thermostat on the lugs at the top of the backplate, then carefully swing

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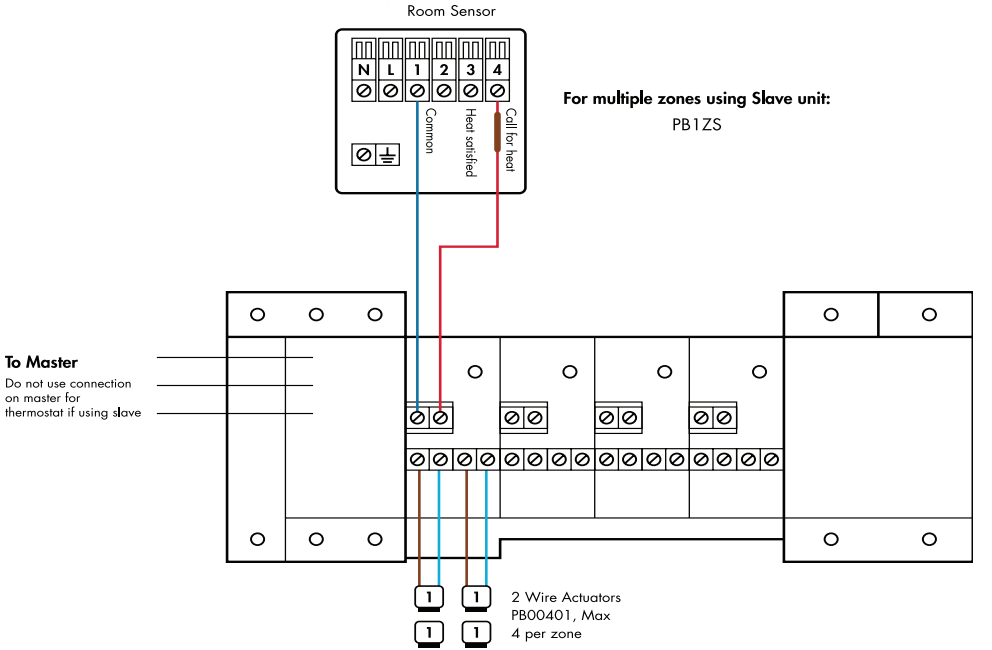

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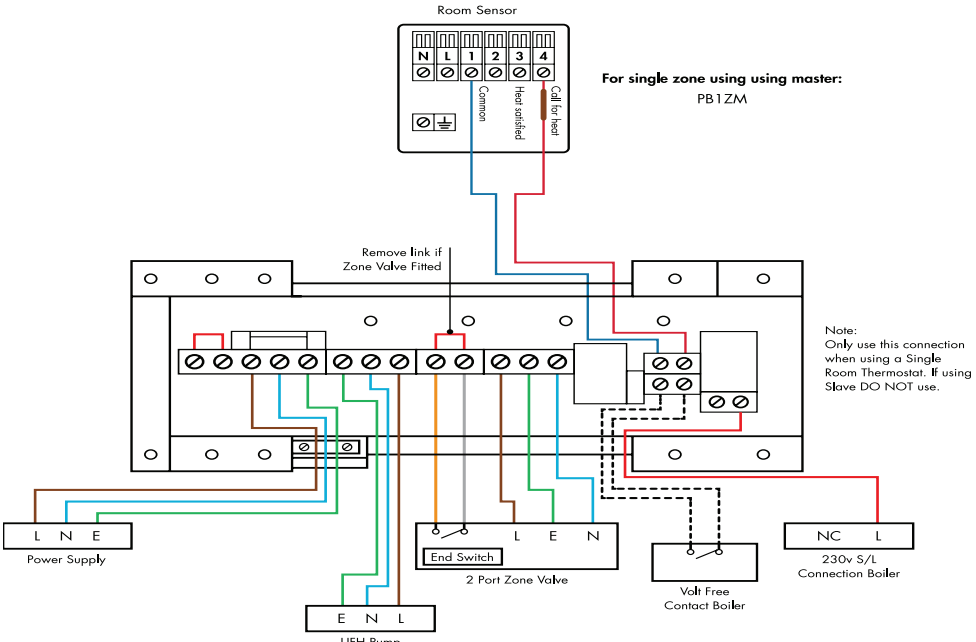

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the Thermostat down and push it carefully back into its plug-in terminal connectors. Locate over the captive screws at the base of the backplate and tighten them so that the Thermostat is locked into position.

6. **Existing Programmer / Time Clock** - any existing programmer or time clock is now redundant. You should either program it to be permanently on (24/7) or preferably remove it, ensuring that the two wires it was switching are safely electrically linked together, preferably by installing a link wire within the heating system. Please check heating system manufacturers wiring instructions for further details.
7. **Finally** check that the Thermostat is functioning correctly and switching the heating system on and off correctly. A simple test for this is to press and hold the Comfort (+) button for 5 seconds. This will activate the Boost mode and turn the heating system on. Check that the web dashboard Heating widget is now showing that the Boost is activated and the heating system is running (Red-glow around house icon at top of Heating widget).
8. **Handover** - Please ensure you handover this document to the householder and direct them to the Heating & Hot Water Control User Manual available for download by clicking on Manuals on the web dashboard (lower right).

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Additional Information

Safety Switch

The Thermostat is fitted with a safety switch that is automatically activated when the front of the Thermostat is removed from the backplate. Safety switch activation will immediately turn the heating off and the web dashboard will show an appropriate warning message. The Thermostat MUST be installed onto the special backplate supplied otherwise the safety switch will not operate and the Thermstat will not work.

Polypipe Heating Control Thermostat Backplate Wiring

Terminal	Description
N	Neutral - Not used, may be used to 'park' unused neutral wire.
L	Live - Not used, may be used to 'park' unused live wire.
1	Common terminal of Thermsotat latching relay
2	Not used
3	Not used
4	'Call for Heat' - Normally open terminal of Thermostat latching relay
⏚	Earth continuity connection

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Thermostat - Delete Heating Hub Pairing

You can delete the Thermostat to Heating Hub pairing by pressing both the Standby and Away buttons together for a minimum of 10 seconds (count to 15). The 3 LEDs will start flashing indicating that it is in pairing mode.

Thermostat Factory Reset

You can factory reset the Thermostat by pressing both the Comfort and Standby buttons together for a minimum of 20 seconds (count to 25). The 3 LEDs will start flashing indicating that it is in Heating Hub pairing mode.

Thermostat - LED Meanings

LED(s)	Flash Count	Meaning
Comfort	Single	In Comfort period and heating
Comfort	Double	In Comfort period and up to temperature
Comfort	Triple	Boost mode active
Standby	Single	In Standby mode
Away	Single (every 1 second)	Battery running low

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LED(s)	Flash Count	Meaning
Away	Single (every 30 seconds)	In Away mode
Away	Double (every 60 seconds)	In Summer mode
Away	Triple (every 30 seconds)	In Holiday mode
ALL	On (1 second) / Off (1 second)	Heating Pairing mode
ALL	Scrolling (Comfort - Standby - Away)	Relay Unit Pairing mode

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SAFETY INFORMATION

To ensure that you use your product safely and correctly please read the warnings & safety precautions below before installing your Polypipe Room Thermostat.

- Isolate the mains power supply to the heating appliance that the Thermostat will be connected BEFORE commencing any wiring work.
- If you are in any doubt about the Thermostat installation whatsoever, DO NOT attempt to install, but consult a qualified electrician or heating engineer.
- Before attempting to fix the backplate to the wall you must ensure that there are no electrical cables or pipes that will be damaged drilling the fixing holes.
- Do not immerse the unit in water or other liquids. If you spill liquid over it, dry it immediately with a soft cloth.
- Do not use or store the product in conditions that could adversely affect the product such as rain, snow, desert and magnetic fields.
- Do not subject the product to excessive force, shock, dust, temperature or humidity.
- Keep the product away from heat sources - radiators, stoves, heaters etc.
- Do not use the product in or near water or in high moisture areas such as bathrooms.
- Do not tamper with the product's internal components. This invalidates the warranty.
- Do not attempt to repair the product yourself.
- Contact the retailer or Customer Services if your product requires servicing.
- If the equipment is used in a manner not specified in this manual, the protection provided by the equipment may be impaired.
- Take care when handling all battery types. Batteries can cause injuries, burns or

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damage to property if they come into contact with conducting materials, heat, corrosive materials or explosives.
- Remove the batteries before storing the product for extended periods.
- Only use fresh batteries. Do not mix new and old batteries.
- Do not dispose of old batteries as unsorted municipal waste, only do so in accordance with your local waste disposal regulations.
- When disposing of this product do so in accordance with your local waste disposal regulations.

CARING FOR YOUR PRODUCT

- Before cleaning, remove the Thermostat from the backplate and remove the batteries.
- Use a lightly dampened cloth. Do not use liquid or aerosol cleaning agents, benzene, thinners, abrasive or corrosive materials.
- Do not scratch hard objects against the product.
- Do not leave discharged batteries in the product.

COMPLIANCE

The CE marking certifies that this product meets the main requirements of the European Parliament and Council Directive 1999/5/EC. A copy of the signed and dated Declaration of Conformity is available on request. Polypipe products are manufactured to ISO-9001 Quality Assurance Standards.

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SPECIFICATIONS - Thermostat

Case dimensions	86mm x 86mm x 37mm
Case material	Thermoplastic, flame retardant
Case ingress protection	IP30
Case electrical protection	Double Insulated
Radio frequency band	868MHz unlicenced ISM band
Operating range	Up to 50m (in free space)
Power source	2 x 1.5V Alkaline AAA batteries
Temperature accuracy - typical	±0.5°C
Temperature accuracy - typical	±0.2°C
Humidity accuracy - typical	±1.8%RH
Latching relay voltage rating	230V a.c. ±10% 50/60Hz
Latching relay contacts rating - Inductive Load	3.5A @250V a.c. power factor Ø0.4
Latching relay contacts rating - Resistive Load	8A @250V a.c. power factor Ø1
Operating temperature range	0°C to +40°C
Storage temperature range	-25°C to +65°C
Relative humidity	25% to 95% non-condensing

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For details on using your new Polypipe heating controls, please download the Heating & Hot Water Controls User Manual document by clicking on Manuals (web dashboard - lower right).

Customer Support
If you have any further questions please check our frequently asked questions at:
https://www.polypipeufh.com
You can also call us on: 01709 770000
(please ensure you state your Heating Hub Unit MAC ID)

Polypipe Limited operate a policy of continuous development and improvement, therefore the content of this document is subject to change without notice.

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